

Substitute Specification

CLAIMS

I claim:

1. (Currently amended) A mist-spraying apparatus for use in an enclosed space, the apparatus comprising

an air-blowing means with an outlet conduit through which air can be blown into the enclosed space and an inlet conduit through which air from within the enclosed space can be drawn for blowing through the outlet conduit to circulate within the space;

a spraying means comprising a pump for delivering liquid from a reservoir to an atomizing nozzle for spraying the liquid into the space in the form of an atomized mist, the atomizing nozzle being located within the outlet conduit so that atomized particles emitted by the atomizing nozzle are entrained in an airstream emitted by said air-blowing means and thereby distributed evenly throughout the space; and

a control means for controlling operation of the air-blowing means and the spraying means, said control means adapting to commence operation of the air-blowing means prior to operation of the atomizing nozzle and to continue operation of the air-blowing means after operation of the nozzle has ceased in order to continue circulation of the air and any atomized particles entrained therein around the space for a predetermined period of time.

2. (Currently amended) An apparatus as claimed in Claim 1, wherein said atomizing nozzle is located centrally within said outlet conduit.

3. (Currently amended) An apparatus as claimed in Claim 1, wherein said outlet conduit has a rectangular cross-sectional profile.

Substitute Specification

4. (Currently amended) An apparatus as claimed in Claim 1, wherein said outlet conduit defines a slot so that the airstream emitted into the space is formed of a slot-jet.

5. (Currently amended) An apparatus as claimed in Claim 1, wherein said atomizing nozzle is inset within said outlet conduit.

6. (Currently amended) An apparatus as claimed in Claim 1, wherein a spraying tip of the atomizing nozzle is inset by at least 25 mm and by no more than 40 mm into said outlet conduit.

7. (Currently amended) An apparatus as claimed in Claim 1, wherein the air- blowing means is provided with a source of steam whereby steam is additionally blown into the enclosed space via said outlet conduit.

8. (Currently amended) An apparatus as claimed in Claim 1, wherein said atomizing nozzle comprises a 60° solid cone nozzle.

9. (Currently amended) An apparatus as claimed in Claim 1, wherein said spraying means is adapted to spray at least 11 liters of liquid per hour at a pressure of $7 \times 10^5 \text{ N per m}^2$ (7 bar).

10. (Currently amended) An apparatus as claimed in Claim 1, wherein said air- blowing means comprises a cylindrical fan.

11. (Currently amended) An apparatus as claimed in Claim 1, being located in proximity to a ceiling at a top of a wall of the enclosed space.

12. (Currently amended) A mist-spraying apparatus as claimed in Claim 1, wherein said reservoir contains a mixture of an oil and an aqueous solution.

13. (Currently amended) A mist-spraying apparatus as claimed in Claim 12, wherein said oil comprises monopropylene glycol or monoethylene glycol.

Substitute Specification

14. (Currently amended) A mist-spraying apparatus as claimed in Claim 12, wherein the mixture comprises less than 1 part oil to every 100 parts aqueous solution by volume.